

### **ABSTRACT**

The invention provides, *inter alia*, proteins that bind to PAPP-A, an 1547 amino acid glycoprotein which can form an ~200 kDa monomer or an ~400 kDa dimer. In one form, the proteins are antibodies. In one embodiment, the proteins can inhibit the ability of PAPP-A to interact (e.g., cleave) substrates such as IGFBP-4, IGFBP-5, and IGFBP-2.